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NOTICE OF ALLOWANCE AND FEE(S) DUE

23906 7590 03/04/2008
E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER

BARLEY MILL PLAZA 25/1122B 4417 LANCASTER PIKE WILMINGTON, DE 19805 EXAMINER RAMIREZ, DELIA M

ART UNIT PAPER NUMBER

DATE MAILED: 03/04/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,581	04/14/2004	Arie Ben-Bassat	CL2371 USNA	7161

TITLE OF INVENTION: METHOD FOR PREPARING PARA-HYDROXYSTYRENE BY BIOCATALYTIC DECARBOXYLATION OF PARA-HYDROXYCINNAMIC ACID IN A BIPHASIC REACTION MEDIUM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	06/04/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GARAT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

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LEGAL PATEN BARLEY MILL	T RECORDS CEN PLAZA 25/1122B	AND COMPANY TER	I be	Certify	ficate of Mailing or Trans	smission g deposited with the United stst class mail in an envelope above, or being facsimile date indicated below.	
4417 LANCAST WILMINGTON						(Depositor's name)	
	,		_			(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/824,581	04/14/2004		Arie Ben-Bassat		CL2371 USNA	7161	
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APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE I	FEE TOTAL FEE(S) DUE	E DATE DUE	
nonprovisional	NO	\$1440	\$300	\$0	\$1740	06/04/2008	
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
RAMIREZ,		1652	435-136000	•			
I. Change of correspondence address or indication of "Fee Address" (S. CFR 1.863). Change of correspondence address (or Change of Correspondence Address form PTO-SB/123) attached. J. Tee Address indication or "Fee Address" Indication form PTO-SB/47; Rev 03-02 or more recent) attached. Use of a Custome Anniher is required.			usted, no name win de printed.				
	ess an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assigned pletion of this form is NO	(B) RESIDENCE: (CITY	atent. If an assignee assignment. and STATE OR CO	UNTRY)	document has been filed for	
4a. The following fee(s) are submitted: Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies			b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038 i	s attached.		
	s SMALL ENTITY state	as. See 37 CFR 1.27.			ENTITY status. Sec 37 C		
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E I DU PONT D	E NEMOURS AND	RAMIREZ, DELIA M		
	RECORDS CENTER	ART UNIT	PAPER NUMBER	
BARLEY MILL P 4417 LANCASTE		1652	_	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 362 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 362 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)
10/824,581	BEN-BASSAT ET AL.
Examiner	Art Unit
Delia M. Ramirez	1652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 11/28/2007.
- The allowed claim(s) is/are 17-23 and 30-40.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) \square All b) ☐ Some* c) ☐ None of the:
 - 1. T Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. | Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date
- 4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- Other .

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DETAILED ACTION

Status of the Application

Claims 17-23 and 30-40 are pending.

Applicant's cancellation of claims 1, 8-16 as submitted in a communication filed on 11/28/2007 is acknowledged.

In view of Applicant's cancellation of claims 1, 8-16, the previous rejection under 35 USC 103(a) applied over the teachings of Cavin et al. in view of Lee et al. is hereby withdrawn.

Reasons for Allowance

1. The following is an Examiner's statement of reasons for allowance. Although the prior art discloses the polypeptide of SEQ ID NO: 4 (Cavin et al.; cited in previous Office actions) and the use of biphasic reaction systems for the enzymatic decarboxylation of ferulic acids (Lee et al.; cited in previous Office actions), the Examiner has found no teaching or suggestion in the prior art directed to a process for the production of para-hydroxystyrene derivatives wherein said process requires the decarboxylation of para-hydroxycinnamic acid in a biphasic reaction system followed by chemical derivatization of the para-hydroxystyrene produced, or a process for the production of para-hydroxystyrene wherein said process requires culturing a host cell which produces para-hydroxycinnamic acid, followed by decarboxylation of the para-hydroxycinnamic acid to produce para-hydroxystyrene in a biphasic reaction system. Therefore, claims 17-23 and 30-40, directed to (1) a process for the production of derivatives of para-hydroxystyrene wherein said process requires contacting para-hydroxycinnamic acid with the polypeptide of SEQ ID NO: 4 in a biphasic reaction system, followed by chemical derivatization of the para-hydroxystyrene, and (2) a process for the production of para-hydroxystyrene, wherein said process requires (a) culturing host cells that produce para-hydroxycinnamic acid, and (b) contacting the

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fermentation medium containing the para-hydroxycinnamic acid with the polypeptide of SEQ ID NO: 4

in a biphasic reaction system to produce para-hydroxystyrene, are allowable over the prior art of record.

Conclusion

Claims 17-23 and 30-40 are allowed.

3. Any comments considered necessary by applicant must be submitted no later than the payment of

the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such

submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delia M. Ramirez whose telephone number is (571) 272-0938. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Nashaat Nashed can be reached on (571) 272-0934. Any

inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

/Delia M. Ramirez/

Delia M. Ramirez, Ph.D. Primary Patent Examiner

Art Unit 1652

DR

February 29, 2008